

AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) A node in an Ethernet network to relay ~~the~~an Ethernet frame, comprising:
an element which inserts two or more VLAN tags into said frame and removes an other said inserted VLAN tag in ~~the~~a relay process of said frame.
2. (Currently Amended) A node as set forth in claim 1 further comprising
an element which replaces two or more VLAN tags of said frame at a time.
3. (Currently Amended) A node as set forth in claim 1 further comprising:
an element which administers said two or more VLAN tags using ~~the~~a forwarding table memory for a change of frame contents during a frame relay.
4. (Currently Amended) A node as set forth in claim 1 further comprising
an element which searches ~~the~~a forwarding table memory using ~~the~~an information from two or more VLAN tags in said frame during a frame relay.
5. (Currently Amended) A node as set forth in claim 1 further comprising
an element which searches ~~the~~a forwarding table memory in ~~the~~a relay process of said frame with combininginga combination of ~~the~~an information from two or more VLAN tags in said frame and ~~the~~an input port, ~~the~~a destination MAC address, ~~the~~a source MAC address and ~~the~~a TYPE field information.

6. (Currently Amended) A node as set forth in claim 1 further comprising an element which
which:

provides a TTL area to show the survival time of the frame in said VLAN tag
inserted to said frame; and

checks whether said survival time has elapsed or not by the value in said TTL
area; and

discards said frame after elapse of said survival time without relaying its said frame in
the relay process of said frame.

7. (Currently Amended) A node as set forth in claim 6 further comprising
an element which decrements the value in said TTL area by one every time said frame
is relayed.

8. (Original) A node as set forth in claim 1 wherein
node control information is stored to said VLAN tag.

9. (Currently Amended) A node as set forth in claim 1 further comprising
an element which changes the self-node status administration corresponding to the
contents content of said VLAN tag.

10. (Currently Amended) A node as set forth in claim 1 wherein
the node status is stored to the an area of said VLAN tag in the relayed frame

corresponding to the a self-node status.

11. (Currently Amended) A frame transfer method of the a node to relay the an Ethernet frame comprising frame, said method comprising:

receiving an Ethernet frame in said node;

a step of inserting two or more VLAN tags to said Ethernet frame at a time or removing said inserted VLAN tags in the relay process of said frame. tags; and

forwarding said Ethernet frame.

12. (Currently Amended) A frame transfer method as set forth in claim 1111, wherein a forwarding table memory for frame contents change during a frame relay is used for administration of said two or more VLAN tags.

13. (Currently Amended) A frame transfer method as set forth in claim 1111, wherein a forwarding table memory is searched during a frame relay using the an information from two or more VLAN tags in said frame.

14. (Currently Amended) A frame transfer method as set forth in claim 1111, wherein a forwarding table memory is searched in the a relay process of said frame with combining a combination of the an information from two or more VLAN tags in said frame and the an input port, the a destination MAC address, the a source MAC address and the a TYPE field information.

15. (Currently Amended) A frame transfer method as set forth in claim 11, wherein:

a TTL area to show ~~thea~~ survival time of the frame is provided in said VLAN tag that is inserted to said frameframe; and

whether said survival time has been elapsed or not is checked by ~~thea~~ value in said TTL areaarea; and

said frame after elapse of said survival time is discarded without being relayed in the relay process of said frame.

16. (Currently Amended) A frame transfer method as set forth in claim 15, wherein the value in said TTL area is decremented by one every time said frame is relayed.

17. (Currently Amended) A frame transfer method as set forth in claim 11, wherein a node control information is stored to said VLAN tag.

18. (Currently Amended) A frame transfer method as set forth in claim 11, further comprising:

changing ~~thea~~ self-node status administration corresponding to ~~the~~ contents of said VLAN tag.

19. (Currently Amended) A frame transfer method as set forth in claim 11, wherein a node status is stored to said VLAN tag area in the relayed frame corresponding to ~~thea~~ self-node status.